NOTE XXVI.

ORTHRAGORISCUS NASUS RANZ. ON THE DUTCH COAST

ву

Dr. C. L. REUVENS.

(Plate 3).

19 November 1896 fishermen caught in the neighbourhood of Helder a large specimen of the moonfish, and brought it immediately to the Zoological station, where it arrived alive. The director, Dr. P. P. C. Hoek, addressed the fish to the Leyden Museum, and we received it next morning, 20 Nov., in the best, fresh condition.

Examining the animal it proved to be *Orthragoriscus* nasus Ranz. It agrees entirely with the specimen from Callantsoog, described by Dr. van Lidth de Jeude in "Notes Leyd. Mus., Vol. XIV, p. 127, pl. 5" 1), though the dimensions are considerably greater.

I will give here a comparative table of the dimensions of both specimens:

| of both specimens. | | |
|--|---------|-------------|
| | Helder | Callantsoog |
| Distance from tip of snout to extre- | | 11 |
| mity of tail | 184 cM. | 123 cM. |
| Distance from root of dorsal fin to root | | |
| of anal fin, measured at their ante- | | |
| rior side | 97 cM. | 76 cM. |
| Distance from root of dorsal fin to root | | |
| of anal fin, measured at their poste- | | |
| rior side | 80 cM. | 64 cM. |
| | | |

See also "Tijdschr. Ned. Dierk. Ver., Ser. II, Dl. III, p. 185, pl. xii."
 Notes from the Leyden Museum, Vol. XVIII.

| Helder | Callantsoog |
|---|-------------|
| Distance from top of dorsal fin to top | |
| of anal fin 218 cM. | 162 cM. |
| Distance between tip of snout and an- | |
| terior side of the root of dorsal fin. 122 cM. | 77 cM. |
| Distance between tip of snout and an- | |
| terior side of the root of anal fin . 108 cM. | 87 cM. |
| Distance from tip of upper jaw to an- | |
| terior side of the root of pectoral fin. 54 cM. | 40 cM. |
| Distance from tip of snout to anterior | |
| side of the root of pectoral fin 59,5 cM. | 43 cM. |
| Distance between tip of upper jaw to | |
| centre of the eye | 19,5 cM. |
| Distance between tip of snout to centre | |
| of the eye | 22,5 cM. |
| Greatest breadth of the dorsal fin 41 cM. | |
| " of the anal fin 39 cM. | |
| The fish weighed 300 Kilo | 90 Kilo |
| The liver 9 Kilo | |

The figure added to this note is made after a photograph taken in the Museum directly after the arrival, and gives at perfect idea of the habitus of the specimen. The animal shall be stuffed and preserved in the collections of the Leyden Museum.

On the figure we can see, that the prominent snout is not less developed than in the specimen from Callantsoog, that there is a very obvious swell above the eye, most prominent a little behind it, whilst it disappears above the middle of the pectoral fin. The cheek also finishes in a swell, passing under and beyond the pectoral, so that, having a frontview of the animal, the eyes and the pectoral fins lie in a horizontal deepening of the body.

Behind and under the pectoral fin horizontal, parallel folds of the skin are to be seen, which are directed towards the tail; the upper one is the most developed.

The band between the body and the tail, which latter has 11 lobes of different size, has no deep grooves, and

Notes from the Leyden Museum, Vol. XVIII,

is all over covered with similar little pricks as the skin of the body. It has two branches in the tail, one between the 4^{th} and 5^{th} lobe, the other, which is the largest, between the 7^{th} and 8^{th} .

The above mentioned characteristics of the snout, of the swell above the eye and the pectoral fin, and of the horizontal folds on the body plead in favour of the meaning of Dr. van Lidth de Jeude, that O. mola and O. nasus must be regarded as two distinct species.

As no osseous tubercles are found on the body besides that on the snout, I think that their presence on other parts of the body can not be regarded as a specific character (see Notes Leyd. Mus., Vol. XVI, p. 129).

The genital organs were undeveloped. In preparing the fish for stuffing an opening was found just behind the anus, which was not found in the specimens from Ameland and Callantsoog (both males).

However such an opening is described by Harting (see p. 26 of his memoir "Notices zoologiques, anatomiques et histologiques sur l'O. ozodura") as the end of the oviduct, and so I believe our specimen to be a female (see also the drawing after Cleland in Smith "Skandinavian fishes" T. II, p. 628).

On the skin and the gills, as well as in the intestines, were found many parasites, which, according to Dr. Horst, belong to the following species:

1°. on the skin

- α. Tristoma molae Blanch., 2 ex. Found also on the skin of our O. mola from Ameland.
- β. Laemargus muricatus Kr., 23 ex. (13 , 10 Q). Not found on our O. mola nor on our O. nasus from Callantsoog. Some of these parasites had made holes of 1 cM. diam., and nearly 2 cM. deep. One lobe of the tail was partly destroyed by them.
- γ. A species nearly allied to L. muricatus. Not found on our former specimens of Orthragoriscus.

Notes from the Leyden Museum, Vol. XVIII.

2°. on the gills

Cecrops Latreillii v. Ben., 14 ex. (8 ♂, 6 ♀). Found

also on the gills of our O. mola and O. nasus.

3°. in the intestines

Bothriocephalus microcephalus Rud., many ex. Found
also in our O. mola.

Finally I can state that in its throat was found a *Pleu*ronectes limanda L., long 185 mM., and in its intestines remainders of *Fucus vesiculosus* L. and *Zostera marina* L.

Leyden Museum, January 1897.